

Stream	Reach	Length (miles)	Functionality/ Trend	Vegetation Types	Comments
Little Boulder C	LBC-001	.4	PFC	Aspen/alder/mixed grass Alder/mixed grass Doug fir/alder	Limited livestock access
	LBC-002	.5	PFC	Alder/dogwood	Limited livestock access
	LBC-003	.7	PFC	Spruce/dogwood	Limited livestock access
Wickiup Creek	WC-001	.4	PFC	Aspen/alder Cottonwood/alder	No livestock access
Baker Creek	BAKE-01	.8	PFC	Aspen/willow/grass	Limited livestock access
	BAKE-02	.6	FAR-NT	Upland shrub/grass Mixed willow/grass Doug fir/Aspen	

PFC = Proper Functioning Condition; FAR = Functional-at-Risk; NF = Non-functional  
DN = Downward trend; NT = No trend; UP = Upward trend

There are also numerous springs and seeps scattered throughout the BLM administered public land within the allotment. Many of the springs that supported reliable water were developed into ponded waterholes or piped into stockwater troughs under authorization through project development permits. These sites support a variety of hydric and upland shrubs with mixed herbaceous grasses dominated by bluegrass species. Site disturbance from project maintenance activities and concentrated wild ungulate and/or livestock grazing is common.

**Wilderness Study Areas (WSA):** The Boulder Creek WSA lies entirely within the Big Boulder/Baker Basin Pasture. The Jerry Peak West WSA also extends into the Big Boulder/Baker Basin Pasture east of the East Fork Salmon River. Both these WSAs are recommended non-suitable to Congress as stated in the 1983 Challis Wilderness EIS. Under the Bureau's Interim Management Policy and Guidelines for Lands Under Wilderness Review (BLM Handbook H-8550, USDI 1995), it is required that these areas be managed so that their wilderness values will not be impaired. Grazing management in all alternatives would be consistent with this policy.

## ENVIRONMENTAL IMPACTS

Environmental impacts to each affected resource are presented in the following table for each alternative and the proposed action. Direct, indirect and cumulative impacts are discussed.

Affected Resource	Alternative 1 Continuation of Existing Permit Authorization in Accordance with the 1982 AMP	Alternative 2 Continuation of Existing Permit Authorization in Accordance with the 1982 AMP with Terms and Conditions Included	Alternative 3 Proposed Action Livestock Controlled Timed Grazing
T/E/S Fish/Fisheries	Limiting livestock grazing to 33 days in the early spring would result in an overall improvement to current fish habitat. Although heavy use would be expected in those scheduled pastures with accessible riparian and aquatic systems, extensive rest periods would be provided during the rest cycle and after the livestock were removed from the grazed pasture to re-vegetate and stabilize impacted streambanks and revitalize grazed plant communities. Fall trailing would impact some localized fishery systems through bank trampling, grazing and browsing. However, due to the limited time frame, livestock would not gain access to many stream systems resulting in an extensive rest period for the majority of stream reaches supporting fish habitat.	TES fish and other fish species and their habitats would be improved from current conditions under this alternative. Livestock would have access to all fish bearing streams within the scheduled use area. However, grazing use would be restricted through grazing standards to avoid heavy grazing, browsing or excessive bank shearing. The application of complete rest from grazing coupled with the grazing use standards would ensure herbaceous communities are allowed enough stubble for regrowth and vigor enhancement, woody vegetation is left in tact to allow for stream shading, normal growth characteristics and age structure, and streambanks are left in tact to avoid excessive sedimentation to the stream.	TES fish and other fish species and their habitat would improve from current conditions under this alternative. Livestock grazing on accessible streams is permissible but, due to the very short time frames followed by extensive rest periods would provide for vegetative regrowth and streambank stabilization. The applied terms and conditions would prevent excessive livestock grazing impacts from occurring on the grazed paddocks. Specific sub-watersheds or drainages with critical fish habitat or unacceptable conditions can be avoided for extended periods through improved livestock control practices providing additional opportunities for rapid, site specific improvement.

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Vegetation Types and Rangeland Resources	Upland vegetation types would be maintained under this alternative due to the limited scheduled grazing use during the growing season coupled with the non-use rest cycle. Utilization on key upland forage species would be slight to light (less than 30%). With the very early growing season grazing, regrowth of key species would be assured resulting in maintained or improved plant vigor. Fall grazing would be limited to trailing with minimal impacts.	Upland vegetation types would be maintained with this alternative. Utilization standards would limit livestock grazing to light (up to 40%). This restriction, coupled with complete rest would result in maintaining the current upland conditions and trends.	Upland vegetation types would be maintained or improved under this alternative. Utilization is expected to be light to moderate with this type of grazing system since the livestock are encouraged to move rapidly through the scheduled paddock avoiding opportunities to re-graze individual plants or to concentrate for extended periods of time. The relatively light grazing use applied on the spring use paddocks and extended rest periods would ensure regrowth opportunities for improved plant vigor and seed production. Paddocks scheduled for fall use would be limited to moderate (<60%) use which would not impact dormant bunchgrass health or vigor. The added flexibility allows opportunities to avoid areas of low production, fragile soils, or historical concentration areas for extended rest periods, if necessary.
Invasive/Non-native Species	The potential for weed expansion and establishment would be minimal under this alternative due to the short grazing period, the grazing utilization standard, and the extended rest cycle all of which result in low impacts to the upland plant communities and encourage plant vigor, seedling establishment, and reduced opportunities for weed encroachment. Localized concentration areas may still exist which encourage weed establishment.	Same as Alternative 1 except the threat of weed distribution and establishment is slightly higher under this alternative due to the slightly higher early grazing utilization standards applied under this alternative. Localized concentration areas may still exist which encourage weed encroachment.	Livestock concentration areas where soils are left bare and susceptible to weed invasion are minimized under this alternative. The threat of increased weed distribution and establishment may be slightly higher under this alternative due to the allowed fall use which may spread viable weed seeds. However, localized disturbed areas and weed infestations can be avoided through controlled livestock herding. Individual paddocks or drainages can be totally avoided for extended periods to allow weed treatment activities to succeed.

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Threatened/ Endangered/ Sensitive Plants	Impacts to TES plants is expected to be minimal under this alternative due to the limited scheduled grazing use and applied rest cycle. The identified plants are not palatable to livestock and are not readily grazed, even during the scheduled early spring grazing period. Some random trampling of individual plants is possible but likely to be minimal and non-fatal if it should occur. Any affects from fall grazing (trailing) would be minimal since these plant species of concern are dormant.	Same as Alternative 1.	Same as Alternative 1. In addition, the added livestock control required under this alternative provides opportunities to avoid areas of concentrated or isolated TES plants for further protection if so warranted. Any affects from scheduled fall grazing would be minimal since these plant species of concern are dormant and not desirable as forage species.
Soils	Soil cover and stability is expected to be maintained under this alternative due to the limited scheduled grazing and applied rest cycle. With light grazing early in the growing season, soil cover from litter would increase overall. Some compaction may occur from livestock grazing while the upland soils are moist. This situation would be a localized event (i.e. north slopes) and minimal in extent. With the resulting improved soil cover accelerated soil erosion is not expected.	Same as Alternative 1. Although a slightly higher utilization level is allowed with this alternative strict conformance to no more than 40% utilization levels coupled with a complete rest cycle would provide adequate soil cover and protection from accelerated soil erosion.	Soil plant and litter cover and soil stability are likely to be maintained or improved under this alternative due to the limited grazing utilization, improved regrowth potential, and the extended rest periods being provided. Paddocks grazed in the fall would not be re-grazed the following spring to allow for plant vigor and full production of plant material for soil cover. Soil compaction is possible on the early grazed paddocks with large numbers of livestock in areas where soils are still moist. This situation is likely to be localized (north slopes) and minimal in extent. Areas with exposed soils (low production areas) and fragile soil sites can be avoided with improved livestock control practices reducing the threat of accelerated soil erosion from these locations. Livestock concentration areas where soils are left bare and highly susceptible to accelerated erosion would also be minimized under this alternative.

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Water Quality	Water quality would be maintained under this alternative due to the limited access the livestock would have to the perennial stream channels and stable uplands. Livestock impacts to streambank vegetation and stream stability would be minimal. Growing season rest combined with the non-use rest cycle would allow ample time for vegetative regrowth and bank stabilization processes to provide shading for reduced temperatures and bank stability for reduced sediment. Fall grazing would be limited to trailing only with minimal impacts expected.	Water quality would likely improve from current conditions under this alternative. Limiting livestock use and presence through the application of the grazing use standards would improve woody and herbaceous plant communities and stabilize streambanks. Stream shading would likely increase through reduced browsing and sediment yield would be reduced through stabilizing streambanks and reduced livestock hoof shearing all of which would result in improved water quality.	Same as Alternative 2. Although livestock use would occur on most stream segments under this alternative, the short duration, extended rest periods, and applied terms and conditions (for both spring and fall use periods) would improve water quality through improved streambank stability and improved woody and herbaceous plant communities. In addition, areas of concern can be avoided for extended periods through improved livestock control practices, if warranted.
Wildlife	It is expected that viable and productive wildlife populations would continue to be supported on this allotment as a result of requirements to maintain soil, water, vegetative resources and ecological processes. However, permitted livestock grazing would reduce the availability of herbaceous vegetative cover on some sites in the allotment. Herbaceous vegetation provides wildlife with cover and forage and is particularly important during spring when calving, fawning, nesting and rearing of young occurs. Herbaceous cover would be reduced primarily on sites that are close to water sources and on sites that are easily accessible to livestock (e.g. areas of gentle terrain). Removal of herbaceous cover would be minimal or nonexistent on ridgetops, steeper slopes	Same as Alternative 1, except: The utilization standards for bluebunch wheatgrass and other key forage species under Alternative 2 would help ensure that herbaceous cover and forage would remain for wildlife. Compliance with utilization standards is expected to improve the availability of herbaceous cover and forage on some sites. The grazing standards and stipulations for woody species in riparian areas, along with riparian stubble-height and bank-shearing criteria, are expected to maintain and improve habitat for wildlife species dependent on riparian habitats.	Same as Alternative 2, except: It is expected that grazing of smaller paddocks would result in higher density of livestock per unit area of land during the period of use. Higher livestock densities in birthing/nesting areas or other preferred habitats (e.g. wildlife fawning/calving areas or sage grouse nesting areas) would increase the potential for disturbance and displacement of wildlife and limitation of productivity and reproductive success. The potential for adverse effects of higher livestock densities on some wildlife species may be partially offset by the availability of undisturbed habitats in adjacent ungrazed paddocks.